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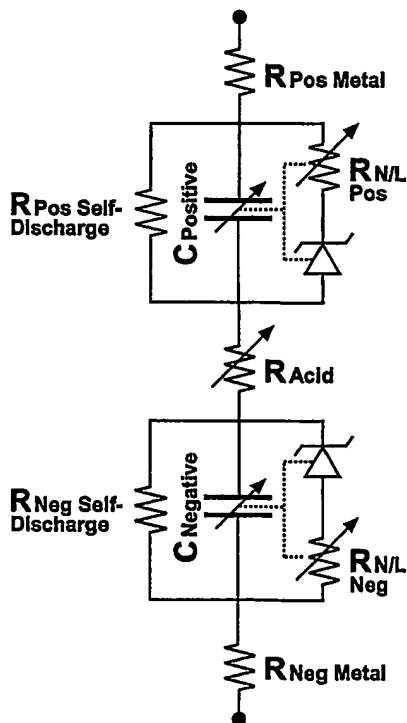
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(54) Title: BATTERY FLOAT MANAGEMENT



(57) Abstract: The invention relates to a new VRLA battery float model. The model covers the steady state and transient float charge behaviour of both positive and negative electrodes. Backup analysis verifies the internal polarisation distribution for a conventional 2V-cell polarisation behaviours can be identified without the need for a physical reference electrode. The estimated individual electrode polarisation allows early detection of common failure modes like negative plate discharge as well as a reference for float voltage optimisation. Furthermore, the positive polarisation relating to minimum grid corrosion may be correlated with the occurrence of the peak of a "Tafel" like resistance used by the model. The model encourages utilisation of low signal perturbation for testing a cell's state of health and state of charge conditions while at float.

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